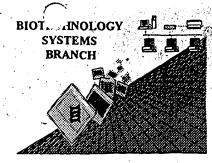


RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable

Application Serial Number: 09/483, 543

RECEIVED

Source:

MAY 3 0 2001

Date Processed by STIC:

TECH CENTER 1600/2900

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER **VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2Kcompliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

ERROR DETECTED SUGGESTED CORRECTION SERIAL NUMBER: 09/483,543

ATTN	: NEW RULES CASES: P	LEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED B The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3, as this will prevent "wrapping".	BY PTO SOFTWARE	
1	Wrapped Nucleics		RECEIVED	
2	Wrapped Aminos	The amino acid number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3, as this will prevent "wrapping".	MAY 3 0 2001	
			TECH CENTER 1600/2900	
3	Incorrect Line Length	The rules require that a line not exceed 72 characters in length. This includes spaces.		
4	Misaligned Amino Acid Numbering	numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs een the numbering. It is recommended to delete any tabs and use spacing between the numbers.		
5	Non-ASCII	This file was not saved in ASCII (DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text so that it can be processed.		
6	Variable Length	Sequence(s) contain n's or Xaa's which represented more than one residue. As per the rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.		
7	Patentin ver. 2.0 "bug"	A "bug" in Patentin version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) Normally, Patentin would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.		
8	Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please use the following format for each skip (2) INFORMATION FOR SEQ ID NO:X: (i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENC (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: This sequence is intentionally skipped	Do not insert any headings under "SEQUENCE CHARACTERISTICS") D NO:X:	
		Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skip	oped sequence(s).	
9	Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please use the following format for each skipped sequence. <210> sequence id number <400> sequence id number 000		
·	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Use of <220> to <223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.		
1	Use of "Artificial" (NEW RULES)	se of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. alid response is Artificial Sequence.		
2 <u> </u>	Use of <220>Feature (NEW RULES)	Sequence(s) are missing the <220>Feature and associated headings. Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial Sequence" or "Unknown" Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)		
3	Patentin ver. 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other means to copy file to floppy disk.		

AMC - Biotechnology Systems Branch - 4/06/2001

#11

1651

RAW SEQUENCE LISTING DATE: 05/14/2001 PATENT APPLICATION: US/09/483,543 TIME: 11:53:46

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\05142001\I483543.raw

Does Not Comply
Corrected Diskette Needed

```
4 <110> APPLICANT: Muir, Tom
         Cotton, Graham
         The Rockefeller University
 8 <120> TITLE OF INVENTION: Multiple Sensor-Containing Polypeptides,
         Methods of Preparation and Uses Thereof
11 <130> FILE REFERENCE: RU 453
13 <140> CURRENT APPLICATION NUMBER: 09/483,543
14 <141> CURRENT FILING DATE: 2000-01-14
16 <160> NUMBER OF SEQ ID NOS: 9
18 <170> SOFTWARE: FastSEQ for Windows Version 3.0
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 8
23 <212> TYPE: PRT
24 <213> ORGANISM: Artificial Sequence
26 <220> FEATURE:
27 <223> OTHER INFORMATION: Cleavage Site for PreScission Protease
29 <400> SEQUENCE: 1
30 Leu Glu Val Leu Phe Gln Gly Pro
31 1
34 <210> SEQ ID NO: 2
35 <211> LENGTH: 12
36 <212> TYPE: PRT
37 <213> ORGANISM: Artificial Sequence
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Peptide Substrate
42 <400> SEQUENCE: 2
43 Glu Ala Ile Tyr Ala Ala Pro Phe Ala Lys Lys
   1
47 <210> SEQ ID NO: 3
48 <211> LENGTH: 64
49 <212> TYPE: DNA
50 <213> ORGANISM: Artificial Sequence
52 <220> FEATURE:
53 <223> OTHER INFORMATION: Primer
55 <400> SEQUENCE: 3
56 aaaagaaaaa aaggcggccg ctcggatctg atcgaaggtc gttgtgcggg caacttcgac
                                                                            60
57 tcgg
                                                                            64
64 <210> SEQ ID NO: 4
65 <211> LENGTH: 40
66 <212> TYPE: DNA
67 <213> ORGANISM: Artificial Sequence
69 <220> FEATURE:
70 <223> OTHER INFORMATION: Primer
72 <400> SEQUENCE: 4
                                                                            40
73 gcaaactggc tcttccgcag ccgctgaagt cctcatcggg
76 <210> SEQ ID NO: 5
```

77 <211> LENGTH: 18

```
RAW SEQUENCE LISTING DATE: 05/14/2001 PATENT APPLICATION: US/09/483,543 TIME: 11:53:46
```

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\05142001\I483543.raw

```
what is the source of the
     78 <212> TYPE: PRT
                                              I genetic material in the sequence?
     79 <213> ORGANISM: Artificial Sequence
     81 <220> FEATURE:
    85 Met Ala Ser Ser Arg Val Asp Gly Gly Arg Ser Asp Leu Ile Glu Gly
86 1
87 Arg Cys
90 <210> SEQ ID NO: 6
91 <211> LENGTH: 18
     82 <223> OTHER INFORMATION Unsure
     91 <211> LENGTH: 18
     92 <212> TYPE: PRT
     93 <213> ORGANISM: Artificial Sequence
     95 <220> FEATURE:
     96 <223> OTHER INFORMATION: Cys-F1-PS-Biotin Construct
     98 <220> FEATURE:
     99 <221> NAME/KEY: misc_feature
     100 <222> LOCATION: 3
     101 <223> OTHER INFORMATION: Xaa = Lys-[Dapa(Fl)]
     103 <220> FEATURE:
     104 <221> NAME/KEY: misc_feature
     105 <222> LOCATION: 17
     106 <223> OTHER INFORMATION: Xaa = [Lys-(Biotin)]
    108 <400> SEQUENCE: 6
W--> 109 Cys Gly Xaá Gly Leu Glu Val Leu Phe Gln Gly Pro Val Arg Lys Gly
    110
         1
W--> 111 Xaa Gly
     114 <210> SEQ ID NO: 7
     115 <211> LENGTH: 11
    116 <212> TYPE: PRT
    117 <213> ORGANISM: Artificial Sequence
    119 <220> FEATURE:
    120 <223> OTHER INFORMATION: High affinity ligand for the N-SH3 Domain of Crk
    122 <400> SEQUENCE: 7
    123 Pro Pro Pro Ala Leu Pro Pro Lys Arg Arg Arg
    127 <210> SEQ ID NO: 8
    128 <211> LENGTH: 318
    129 <212> TYPE: PRT
    130 <213> ORGANISM: Artificial Sequence
    132 <220> FEATURE:
    133 <223> OTHER INFORMATION: Protein Kinase Target
    135 <220> FEATURE:
    136 <221> NAME/KEY: misc_feature
    137 <222> LOCATION: 311
    138 <223> OTHER INFORMATION: Xaa = Lys-[Dapa(Fl)]
    140 <400> SEQUENCE: 8
    141 Lys Arg Gly Cys Ala Gly Asn Phe Asp Ser Glu Glu Arg Ser Ser Trp
    143 Tyr Trp Gly Arg Leu Ser Arg Gln Glu Ala Val Ala Leu Leu Gln Gly
```

RAW SEQUENCE LISTING DATE: 05/14/2001 PATENT APPLICATION: US/09/483,543 TIME: 11:53:46

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\05142001\I483543.raw

```
25
    144
         Gln Arg His Gly Val Phe Leu Val Arg Asp Ser Ser Thr Ser Pro Gly
    145
                                     40
    146
                 35
         Asp Tyr Val Leu Ser Val Ser Glu Asn Ser Arg Val Ser His Tyr Ile
    147
                                  55
                                                      60
    148
         Ile Asn Ser Ser Gly Pro Arg Pro Pro Val Pro Pro Ser Pro Ala Gln
    149
                                                 7.5
                             70
    150
         Pro Pro Pro Gly Val Ser Pro Ser Arg Leu Arg Ile Gly Asp Gln Glu
    151
                                              90
    152
                         85
         Phe Asp Ser Leu Pro Ala Leu Leu Glu Phe Tyr Lys Ile His Tyr Leu
    153
                                          105
                                                             110
    154
                     100
         Asp Thr Thr Thr Leu Ile Glu Pro Val Ala Arg Ser Arg Gln Gly Ser
    155
                 115
                                     120
    156
         Gly Val Ile Leu Arg Gln Glu Glu Ala Glu Tyr Val Arg Ala Leu Phe
    157
                                                     140
             130
                                 135
    158
         Asp Phe Asn Gly Asn Asp Glu Glu Asp Leu Pro Phe Lys Lys Gly Asp
    159
                            150
                                                 155
    160
         Ile Leu Arg Ile Arg Asp Lys Pro Glu Glu Gln Trp Trp Asn Ala Glu
    161
                                             170
                         165
         Asp Ser Glu Gly Lys Arg Gly Met Ile Pro Val Pro Tyr Val Glu Lys
    163
                                          185
                                                              190
    164
                     180
         Tyr Arg Pro Ala Ser Ala Ser Val Ser Ala Leu Ile Gly Gly Asn Gln
    165
                                                          205
                                      200
    166
                 195
         Glu Gly Ser His Pro Gln Pro Leu Gly Gly Pro Glu Pro Gly Pro Tyr
    167
                                                      220
    168
             210
                                  215
         Ala Gln Pro Ser Val Asn Thr Pro Leu Pro Asn Leu Gln Asn Gly Pro
    169
                                                  235
                              230
    170
    171 Ile Tyr Ala Arg Val Ile Gln Lys Arg Val Pro Asn Ala Tyr Asp Lys
                                              250
    172
         Thr Ala Leu Ala Leu Glu Val Gly Glu Leu Val Lys Val Thr Lys Ile
    173
                                          265
    174
                      260
         Asn Val Ser Gly Gln Trp Glu Gly Glu Cys Asn Gly Lys Arg Gly His
    175
                                                          285
                                      280
    176
                275
         Phe Pro Phe Thr His Val Arg Leu Leu Asp Gln Gln Asn Pro Asp Glu
    177
                                  295
    178
          290
                                                     300
W--> 179 Asp Phe Ser Gly Cys Gly Xaa Gly Leu Glu Val Leu Phe Gln
    180 305
                              310
    190 <210> SEQ ID NO: 9
    191 <211> LENGTH: 326
    192 <212> TYPE: PRT
    193 <213> ORGANISM: Artificial Sequence
     195 <220> FEATURE:
    196 <223> OTHER INFORMATION: Recombinant Intermediate
    198 <220> FEATURE:
    199 <221> NAME/KEY: misc_feature
     200 <222> LOCATION: 311
     201 <223> OTHER INFORMATION: Xaa = Lys-[Dapa(Fl)]
     203 <220> FEATURE:
     204 <221> NAME/KEY: misc_feature
```

RAW SEQUENCE LISTING DATE: 05/14/2001 PATENT APPLICATION: US/09/483,543 TIME: 11:53:46

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\05142001\1483543.raw

```
205 <222> LOCATION: 325
  206 <223> OTHER INFORMATION: Xaa = [Lys-(Biotin)]
  208 <400> SEQUENCE: 9
  209 Lys Arg Gly Cys Ala Gly Asn Phe Asp Ser Glu Glu Arg Ser Ser Trp
  210
       Tyr Trp Gly Arg Leu Ser Arg Gln Glu Ala Val Ala Leu Leu Gln Gly
  211
                                      25
       Gln Arg His Gly Val Phe Leu Val Arg Asp Ser Ser Thr Ser Pro Gly
  213
                                                      45
  214
        35
                                  40
       Asp Tyr Val Leu Ser Val Ser Glu Asn Ser Arg Val Ser His Tyr Ile
  215
  216
                               55
       Ile Asn Ser Ser Gly Pro Arg Pro Pro Val Pro Pro Ser Pro Ala Gln
  217
  218
                           70
       Pro Pro Pro Gly Val Ser Pro Ser Arg Leu Arg Ile Gly Asp Gln Glu
  219
                      85
  220
       Phe Asp Ser Leu Pro Ala Leu Leu Glu Phe Tyr Lys Ile His Tyr Leu
  221
                   100
                                      105
                                                          110
       Asp Thr Thr Thr Leu Ile Glu Pro Val Ala Arg Ser Arg Gln Gly Ser
  223
  224
          115
                                  120
                                                      125
       Gly Val Ile Leu Arg Gln Glu Glu Ala Glu Tyr Val Arg Ala Leu Phe
  225
                               135
                                                  140
  226
          130
       Asp Phe Asn Gly Asn Asp Glu Glu Asp Leu Pro Phe Lys Lys Gly Asp
  227
                                              155
  228
                           150
       Ile Leu Arg Ile Arg Asp Lys Pro Glu Glu Gln Trp Trp Asn Ala Glu
  229
  230
                      165
                                          170
       Asp Ser Glu Gly Lys Arg Gly Met Ile Pro Val Pro Tyr Val Glu Lys
  231
                                     185
                                                         190
                  180
       Tyr Arg Pro Ala Ser Ala Ser Val Ser Ala Leu Ile Gly Gly Asn Gln
  233
                                  200
              195
  234
       Glu Gly Ser His Pro Gln Pro Leu Gly Gly Pro Glu Pro Gly Pro Tyr
  235
  236
                               215
                                                   220
       Ala Gln Pro Ser Val Asn Thr Pro Leu Pro Asn Leu Gln Asn Gly Pro
  237
                                               235
  238
                           230
       Ile Tyr Ala Arg Val Ile Gln Lys Arg Val Pro Asn Ala Tyr Asp Lys
  239
                                           250
                       245
       Thr Ala Leu Ala Leu Glu Val Gly Glu Leu Val Lys Val Thr Lys Ile
  241
                                                          270
  242
                   260
                                       265
  243
       Asn Val Ser Gly Gln Trp Glu Gly Glu Cys Asn Gly Lys Arg Gly His
                                   280
  244
               275
  245
       Phe Pro Phe Thr His Val Arg Leu Leu Asp Gln Gln Asn Pro Asp Glu
                               295
                                                 300
       Asp Phe Ser Gly Cys Gly Xaa Gly Leu Glu Val Leu Phe Gln Gly Pro
-> 247
            , 310
  248
       Val Arg Lys Gly Xaa Gly
-> 249
```

VERIFICATION SUMMARY

DATE: 05/14/2001

PATENT APPLICATION: US/09/483,543

TIME: 11:53:47

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\05142001\I483543.raw

L:109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 L:179 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 L:249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9